

What is claimed is:

1. A method of fabricating a protective film comprising:

providing a vacuum ultraviolet radiation CVD (Chemical Vapor  
Deposition) system comprising a vacuum ultraviolet rays generator, a reactor  
5 provided with a platform for supporting a substrate, a heat retainer provided on  
the platform, and a window separating the vacuum ultraviolet rays generator from  
the reactor;

feeding an organic stock gas from a gas feeder into the reactor while  
retaining temperature of the substrate at a low temperature with the heat retainer;

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irradiating simultaneously the reactor with vacuum ultraviolet rays from  
the vacuum ultraviolet rays generator through the window.

2. A method of fabricating a protective film according to claim 1,

wherein retaining of the temperature with the heat retainer is carried out such that

15 the temperature of the substrate is kept at a low temperature in a range of 25°C to  
100°C.

3. The method of fabricating a protective film according to claim 1,

wherein an organosilazane gas having Si-N bonds is used for the organic stock  
gas.

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4. The method of fabricating a protective film according to claim 1,

further comprising adding an additive gas for increasing nitrogen content in the protective film, or a regulator gas for use in regulating a partial pressure of the organic stock gas in the reactor to the organic stock gas so as to be fed from the gas feeder into the reactor.